PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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International application No. PCT/IN2004/000142			International filing date (day/month 20.05.2004	(year) Priority date (day/month/year) 19.03.2004
	national Patent Clas C07H1.06 C07		ational classification and IPC	
Applic PHA		ARE PRIVATE L	IMITED	
1.	olished by this International Preliminary Exami			
2.	This REPORT c	onsists of a total o	of 5 sheets, including this cover s	heet.
3.	This report is als	so accompanied b	y ANNEXES, comprising:	
	a. 🛭 sent to th	e applicant and to	o the International Bureau) a total	of 43 sheets, as follows:
	⊠ shee and <i>k</i>	ts of the description	on, claims and/or drawings which ng rectifications authorized by this	have been amended and are the basis of this Authority (see Rule 70.16 and Section 607 of
	beyo	ts which supersec nd the disclosure elemental Box.	le earlier sheets, but which this A in the international application as	uthority considers contain an amendment that filed, as indicated in item 4 of Box No. I and the
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Applicant's or agent's file reference

IAP16 Rec'd PCT/PTO 18 SEP 2006

10/593158

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IN2004/000142

_	Box	(No. I	Basis of the re	port				
1.	Wit	With regard to the language, this report is based on						
	\boxtimes	the international application in the language in which it was filed						
		of a tra	nstation furnishe	rnational application in ed for the purposes of:		anguage		
		☐ publ	ication of the in	(under Rules 12.3(a) a ternational application (nary examination (unde	(under Rule 12.4)	(a)) and/or 55.3(a))		
2.	hav	e been i	furnished to the	s* of the international a receiving Office in resp nd are not annexed to t	onse to an invita	eport is based on tion under Article	(replacement sheets 14 are referred to in	which this
	Des	cription,	Pages					
	1-23	3		as originally filed				
	Clai	ms, Nun	nbers					
	1-23	3		as originally filed				
	24,	25		received on 03.11.	2005 with letter of	18.10.2005		
	Dra	wings, S	heets					
	1-6			as originally filed				
		a seque	ence listing and	or any related table(s)	- see Supplemen	ital Box Relating to	o Sequence Listing	
3.		The arr	endments have	resulted in the cancell	ation of:			
			description, pag claims, Nos.	es				
		☐ the	drawings, sheet					
			sequence listing table(s) related	(specify): to sequence listing (sp	ecify):			
	5 7	•	` '	stablished as if (some		nte annoyad to thi	is roport and listed by	olow
4.	⊢⊠ had Sup	not bee	n made, since t tal Box (Rule 70	hey have been conside	ered to go beyond	the disclosure as	s filed, as indicated in	the
			description, pag claims, Nos. 26					
		the €	drawings, sheet	s/figs 7,8				
			sequence listing table(s) related	(specify): to sequence listing (sp	ecify):			
	*	If ite	em 4 applies	, some or all of	these sheets	may be marke	d "superseded."	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IN2004/000142

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

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Novelty (N)

Yes: Claims 1-23

No: Claims

24,25

Inventive step (IS)

Yes: Claims

Claims

1-23

No:

24,25

Industrial applicability (IA)

Yes: Claims

1-25

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET) International application No.

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Re Item I Basis of the report

Amended claims 24 and 25 are considered allowable since in the original description (page 4 lines 9-16, page 23 lines 11-14) it is explicitly stated that the products from the process be amorphous or non-crystalline.

All other amendments however, being page 7 the description of the two extra figures, the extra material of pages 23-26, new claims 26-31 and new figures 7 and 8 are considered not-allowable (Rule 70.2(c) PCT) since in the original application there is no basis for those amendments. There can be no basis for new figures since those figures cannot be exactly the same as a text, therefore, the content of those figures cannot have been present in the original application. The new added pages as well as the new claims 26-31 are also considered to extent the scope of the original application because the addition of particle sizes was not present at all (only one remark, page 23 line 14) where it is stated that the powders have smaller particle size. However, no numbers are specified, therefore, any added number is considered unallowable added matter.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: P.H. Fairclough et al. Carbohydrate Res. 40 (1975) 285-298

D2: US4380476

Novelty

1

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of newly filed claims 24 and 25 is not new in the sense of Article 33(2) PCT.

The documents D1 and D2 disclose the synthesis and isolation of sucralose, thus claims 24 and 25 lack novelty since a product by process must be new and inventive. A product is not rendered novel merely by the fact that it is produced by a new process. Moreover, both D1 and D2 disclose non crystalline sucralose (D1 page 293, sucralose was obtained as a syrup; D2 column 10 line 14 as a syrup) therefore, claims 24 and 25 are considered not

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

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novel.

Inventive step

The present claims 1-23 meet the criteria of Article 33(1) PCT in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claims 1-23, and discloses the synthesis and isolation of sucralose

The subject-matter of claims 1-23 differs from this known subject matter in that a drying step or super critical extraction step as in claim 1 is included. Furthermore, a deacetylation of intermediates of chlorinated sucrose is performed before as well as after said drying step.

The problem to be solved by the present invention may therefore be regarded as the provision of further processes for the synthesis and isolation of sucralose.

The solution proposed in claims 1-23 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

It is not obvious for the skilled person to include a drying step as in claim 1 and to perform a deacetylation before as well as after said drying step. In D1 there is no incentive to do so